Criteria for Assessing Wildlife Potential of an Urban Area

I. Contextual or external considerations

1. What type of habitat is it? Some habitat types are more critical than others because of limited supply, sensitivity to disturbance, unique wildlife species, or other factors. In general, priority should be given to streams, wetlands, marine shorelines, prairies/meadows, and old-growth/mature forests. Areas with two or more habitat types may merit higher priority than an area representing only a single habitat type.

2. How large is the area? Generally, large patches of a given habitat type are more valuable than small patches. Optimal patch size in western Washington may be around 75-100 acres. However, the case can be made to protect relatively smaller patches (e.g., 5-20 acres) of diverse vegetation that are more widely distributed across the urban landscape, because these areas help to bring more people in contact with urban wildlife that persist in these smaller patches. Woodlots often serve as "island refuges" for species that would otherwise not be found in a residential neighborhood.

3. Does the area serve as a "corridor" to link otherwise isolated natural areas, parks, preserves, open spaces, or large tracts of land designated for long-term forestry? Corridors are valuable in facilitating movement of animals and in minimizing negative attributes (i.e., reduced numbers and greater vulnerability to local extinction) of island populations. Riparian areas usually provide important movement corridors in urban-rural landscapes.

4. Does the area serve as a "buffer", or is it surrounded by a buffer? Buffers are especially important when human activity may affect the area.

5. What are the surrounding habitat types or land uses? The wildlife in the area may be positively or negatively affected by adjacent habitat or land uses. An area adjacent to an existing park will be more valuable to wildlife than a similar area adjacent to commercial or industrial development.

II. Internal considerations

6. How structurally diverse (vertically and horizontally) is the habitat? Vertical diversity is derived from the amount and distribution of vegetation and other structural elements in various zones ranging from underground to the tops of the tallest trees. Horizontal diversity is determined by the size and distribution of vegetation patches across the landscape. Greater structural diversity generally increases the area's wildlife diversity. Therefore, a wetland with a patch of trees or open water is generally more valuable than a uniform stand of cattails or spirea. Similarly, a forest with a well-developed understory is generally more valuable than a dense forest with no understory, and it is generally more valuable than a golf course with widely scattered trees amid acres of lawn.

   It should be remembered, however, that structural diversity is not static; areas with low structural diversity may become more valuable to fish and wildlife through restoration efforts, particularly in areas that have been degraded by human activities.

7. What are the "edge" conditions? Edges (ecotones) are utilized by relatively greater numbers of species. An area with a mosaic of habitat types that provide an undulating edge is more valuable to wildlife than an area of equal size but with a linear edge.

8. Are snags and/or large trees present? Snags serve a number of important functions for wildlife, especially cavity-nesting birds and mammals. If snags have to be removed for safety reasons, the stump should be left and should be as tall as possible; even decaying stumps only a few feet high can be beneficial to wildlife.

9. Are downed logs present? Logs also serve a number of important functions for some wildlife species, particularly in or near streams and wetlands.

10. Is water present or can it be safely accessed nearby by wildlife? Water is one of the essential components of habitat; wetlands and riparian areas are especially important for wildlife.

11. Do any endangered, threatened, or other priority species (as defined by WDFW) use the area at some time during the year for reproduction? for foraging? for shelter? Areas with priority species are generally more valuable than areas without these species.